GreenConnect™

Wireless Forward Phase Dimmer
Cat. No. ZBM00
Ratings: 120VAC, 60Hz.

LEVITON®

WARNINGS:
- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!**
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.

CAUTIONS:
- Use this device with **copper or copper-clad wire only.**
- For indoor applications only.
- **SAVE THESE INSTRUCTIONS.**

DI-000-ZBM00-02A

Product Description
GreenConnect dimmers deliver simple wireless lighting control. Designed for use with incandescent, dimmable LED, or CFL bulbs, GreenConnect dimmers offer a scalable and flexible wireless solution to meet the control needs of any space. Ideal for new construction or retrofits with no new control wiring, room controller, hub, or gateway required.
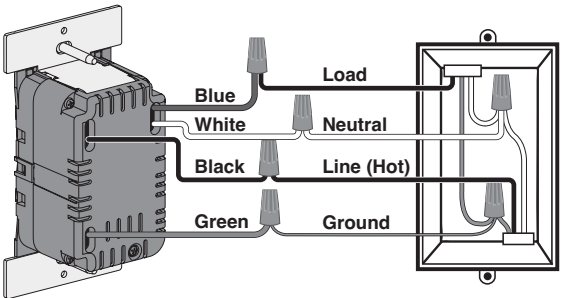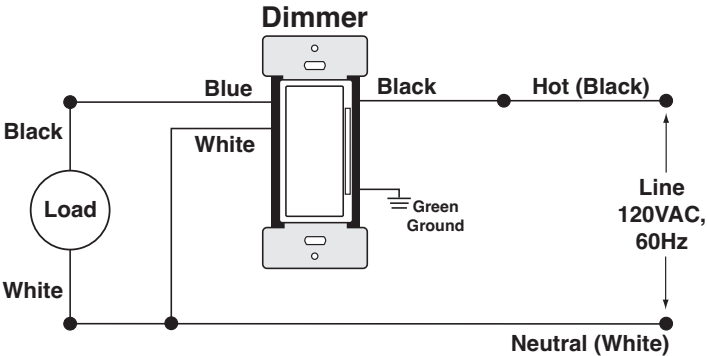
Before Installation
- Ensure location is within network range.
- Requires single gang device back-box.
- Supports multi-gang installations.
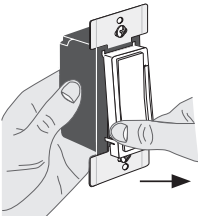- Requires Decora® faceplate, sold separately.

Installation
WARNING: **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER at circuit breaker or fuse and test that power is off before wiring!**
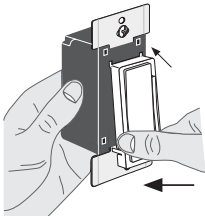
1. Remove 0.75 in. of insulation from the line and load wires. Remove precut insulation from the dimmer wires and connect according to the wiring diagram. Ensure wires are firmly connected with no exposed copper.

2. Gently place the wires and your device into the wall box and attach with screws provided.

3. Restore power and test ON/OFF operation. LED locator light should be ON when load is OFF.

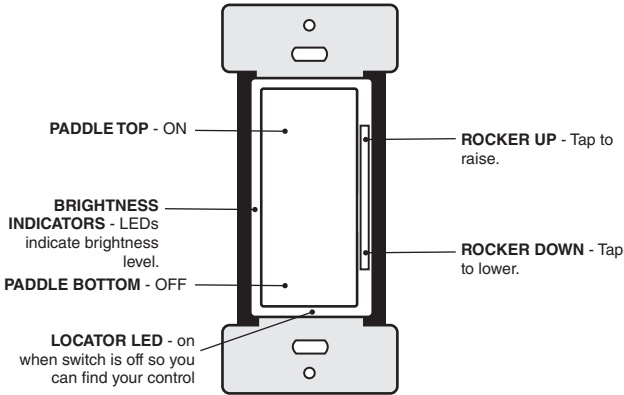**4.** If desired, change switch color.
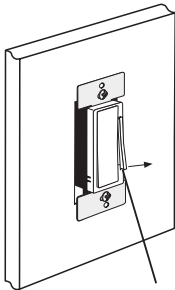
5. Install Decora faceplate.

To release, push sides.   Line up and press in to attach.

6. Enroll device and configure your system.

PADDLE TOP - ON
BRIGHTNESS INDICATORS - LEDs indicate brightness level.
PADDLE BOTTOM - OFF
LOCATOR LED - on when switch is off so you can find your control
ROCKER UP - Tap to raise.
ROCKER DOWN - Tap to lower.

Replacing Lamps or Bulbs
Engage the air-gap switch by gently pulling out from the bottom of the dimming rocker until the bottom of the rocker lifts completely out of the frame and a click is heard (refer to Figure). LED's will turn OFF. This will stop power to the fixture to replace the bulb. After servicing is complete, press the rocker back into place for normal operation.

Gently pull out from bottom

SPECIFICATIONS			
Catalog No.	ZBM00-10W		
Input Voltage/Frequency	120VAC, 60Hz.		
Input Current			
120V	Standby: 0.2W Max: 0.5W+Load Power		
Load Ratings	Single	Two Devices	More than 2 Devices
LED, CFL, Electronic Ballast @ 120V	1000W	675W	625W
Magnetic Ballast @ 120V			
Resistive, Tungsten @ 120V			
Motor @ 120V	Not rated for use		
IP Rating	IP10		
Network Connections	IEEE 802.15.4, 2.4Ghz wireless mesh network up to 75' range between devices		
Operating Temperature	32°F - 104°F (0°C - 40°C)		
Storage Temperature	-40°F - 185°F (-40°C to 85°C)		
UL Impulse Voltage	2500V<120V>		
UL Pollution Degree	2		
UL Disconnection Type	Micro		

System Programming

1. Required components

a. GreenConnect systems require one load controller to create a wireless network and function as the network manager. This can be a wireless power pack or line voltage wall station. Receptacles and battery-powered devices cannot create a network.

b. A maximum combination of 16 load controllers, wall stations, or sensors can be enrolled into the network.

c. GreenConnect devices are also compatible with GreenMAX DRC Wireless for systems that require more than 16 devices.

2. Creating a GreenConnect network

a. Ensure no other networks within the building are open before proceeding.

b. Enter programming mode by pressing and holding the test button on the load controller or the top paddle of the wall station until the LED blinks amber once, then release (approximately seven seconds). The LED will begin blinking amber rapidly.

c. Tap the test button or top paddle twice to create a new network and designate the device as the network manager. The load will toggle ON and OFF twice and the LED will begin to blink green slowly once the network has been created and is open for enrollment.

d. Proceed to device enrollment.

3. Enrolling devices to a GreenConnect or GreenMAX DRC Wireless network.

a. Enter programming mode on the device.

b. Tap the test button or top paddle once to enter enrollment mode. The LED will begin blinking green slowly while searching for a network to join. Upon successful enrollment into a GreenConnect network, the LED will blink green rapidly three times and all enrolled devices will toggle their load ON and OFF twice.

c. To enroll the device into a GreenMAX DRC network, use the GreenMAX DRC App to scan the QR code and follow the instructions included with the GreenMAX DRC room controller.

d. While the network is open, the LED on all connected devices will blink green slowly. Every 60 seconds the LED of the network manager will pause and blink red once for each device enrolled in the network.

e. If after two minutes the device does not find a network to join, the LED will blink red three times and exit enrollment mode.

f. To end enrollment and close the network, tap the test button or top paddle once on the network manager. The LED will stop blinking green, blink red three times and all devices will toggle their load ON and OFF.

g. The network will automatically close if after 10 minutes no new devices have been enrolled.

4. Adding a device to an existing network

a. Enter programming mode on the device that was used to create the network.

b. Tap the test button or top paddle once to open the network. Battery-powered devices cannot open a network.

c. Proceed to device enrollment.

5. Resetting device

To remove a device from a network, press and hold the test button on the load controller, or sensor, or top paddle of the wall station until the LED blinks amber twice (approximately 12 seconds) then release. The LED will blink red rapidly while the device leaves the network and resets to factory default settings. If the device was a network manager, the network is also deleted.

6. Sensor settings

a. Device settings are saved in the load controller managing the network.

b. Default settings
   i. Mode: Auto-ON/Auto-OFF
   ii. Sensitivity: High
   iii. Occupancy time-out: 15 minutes
   iv. Partial Off: Disabled
   v. Auto-ON level: 50%
   vi. Photocell: Disabled

7. Adjusting sensor settings

a. Enter programming mode on the network manager.

b. Tap the test button or top paddle the number of times that corresponds to the menu number you want to access. The LED will pause, blinking amber and blink back green the menu number selected, pause, then blink amber the menu option currently saved.

c. Once within the menu, tap the test button or top paddle again the number of times that corresponds with the option you want to select. The LED will blink amber according to the option that is selected.

d. To return to programming mode, press and hold the test button or top paddle for seven seconds then release. The LED will resume blinking amber once in programming mode.

8. Sensor Menus

Menu #3: Auto-ON level	
Setting #	Value
1	100%
2	50% (default)
3	25%
4	Manual-ON
5	Restore last level

Menu #4: Sensitivity	
Setting #	Value
1	Medium
2	Low
3	High (default)

Menu #5: Occupancy time-out	
Setting #	Value
1	Test mode (30 seconds for five minutes then reverts to prior setting)
2	60 minutes
3	30 minutes
4	15 minutes (default)
5	5 minutes
6	Disabled

Menu #6: Partial-OFF level	
Setting #	Value
1	Disabled(default)
2	50%
3	25%

Menu #7: Partial-OFF time-out	
Setting #	Value
1	5 minutes
2	15 minutes (default)
3	30 minutes
4	60 minutes

Menu #8: Daylighting Target	
Setting #	Value
1	Disabled (default)
2	25 footcandles
3	35 footcandles
4	45 footcandles

9. Device diagnostics

To check device status, press and hold the test button on the load controller, or sensor, or top paddle of the wall station for approximately four seconds then release. Observe LED and see table below.

LED color	Blink Rate	Status
Green	1 time	Enrolled, no communication from the network
Green	2 times	Enrollment incomplete
Green	3 times	Enrolled in active network
Red	3 times	Not enrolled in a network

10. What to do if...

• Load does not turn ON or status LED does not light up.
   - Air gap switch is engaged. Press rocker to disengage.
   - Breaker is OFF or tripped. Confirm breaker is ON.
   - Confirm device is being supplied power.
   - Light bulb(s) burned out, not installed, or not dimmable. Replace and install as needed.
   - Confirm load wiring is correct.
   - Ensure switched output wiring is correct.

• Lights flicker or do not dim as expected.
   - Confirm load complies with minimum and maximum requirements
   - Lamp has a bad connection
   - Wire connectors not firmly secured

• Device cannot be enrolled.
   - Maximum number of devices have been enrolled to the network.
   - Device is out of range.

FCC CAUTION:

Changes or modifications not expressly approved by Leviton Manufacturing Co., could void the user's authority to operate the equipment.

FCC STATEMENT:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.

— Increase the separation between the equipment and receiver.

— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

— Consult the dealer or an experienced radio/TV technician for help.

IC STATEMENT:

This equipment complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.